

**DYNACOMP**

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# **HEARTS 1.5**



## HEARTS 1.5

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### GENERAL

HEARTS 1.5 is a program written in BASIC in which the player is opposed by two computer "opponents." If you are already familiar with the card game of hearts, then you know that there are many variants of this game, some subtly different from each other, others grossly different. A recent edition of Hoyle's Games\* lists at least eight distinctly different ways in which to play this game. The version presented here is yet another variant, one which we are confident will provide you with many hours of enjoyable diversion.

The rules of hearts are quite simple. When a card is led, all players must follow suit if possible. The highest card of the suit led takes the trick; i.e., all of the cards played in that particular round. As in most card games, the Ace of a suit is the highest valued card which can be played. HEARTS 1.5 is a three-handed game, so each trick is composed of three cards. There are 17 rounds of play. You will note that the three hands multiplied by the 17 rounds of play only accounts for 51 of the 52 cards in the deck. The extra card is kept aside until after the first trick is played out. The winner of the first trick keeps the extra card.

The object of hearts is to avoid taking tricks which contain any hearts. For each heart which a player receives, the player is penalized with a point. If a player receives all 13 hearts, then that player gets 13 points. It is the player having the lowest point score who wins the game. In all, 26 points are given out; the hearts suit accounting for half the total. One card, the Queen of Spades, accounts for the remaining 13 points. Therefore, the proper defensive strategy is to do whatever is required in order to avoid taking that Queen of Spades (sometimes known as the "Black Maria").

Since it is required that all players must follow suit (i.e., if a diamond is led, everyone must play a diamond if possible), the only opportunity for initially discarding hearts or the Queen of Spades is to be void in the suit which was led. In such instances, the player void in that suit is allowed to discard any card of his choice.

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\* Hoyle's Games, Westport Publishers, Fairfield, New Jersey

These rules are the basis of essentially all variants of the game of hearts. The following rules apply to HEARTS 1.5:

The opening lead must be the two of clubs. Which-ever hand holding that card must lead it in order to start the game. For the case in which none of the three hands has the two of clubs (this occurs only when the two is that extra card mentioned earlier), then the hand containing the three of clubs must lead it to start the game.

Hearts may not be led until a heart has been discarded by a player onto a trick (for the situation when the extra card is a heart and is taken by the player winning the first trick, hearts are not considered broken and any hearts led prior to hearts being "broken" will result in an error message).

After all hands are dealt out, each player selects three cards from his hand which he would like to get rid of. These cards are then passed to the opponent to the player's left. Play begins after each hand has received its three cards from the other players.

Some variants of this game allow a card (usually the ten of diamonds) to carry a negative point value, thus making it very desirable to capture that card. HEARTS 1.5 does not incorporate this particular variant. One other variant not incorporated in HEARTS 1.5 is the ability of a player to "go all the way" (sometimes referred to as "shoot the moon"). When this occurs, it means that the player has taken all 26 points. Rather than penalizing that player with the 26 points, most versions of hearts add 26 points to each of the opponents' cumulative scores and zero points to the player who went all the way. As mentioned, HEARTS 1.5 does not recognize this option. If you take all 26 points, they are yours!

## PROGRAM DESCRIPTION

HEARTS 1.5 "shuffles the cards" by using the built-in RND function of your BASIC interpreter. Three hands are automatically redealt after each round of play until a player's point total exceeds some pre-selected value (a game is usually played to a total of 50 to 100 points). When a player's score equals or exceeds that total, then the player with the lowest point total is declared the winner. HEARTS 1.5 displays the score for each game plus the accumulated score after each game is completed. The quality of the

game which the computer plays against you is quite good, and you can feel proud of your card-playing ability if you succeed in beating both computer opponents.

Built-in error messages are printed as necessary to prevent you from renegeing (not following suit when you are able to), from leading a heart before that suit has been broken, from playing a card which does not exist in your hand, and from simply making a typographical error when entering your play.

Note from the sample game shown that the card abbreviations are logical. Each card is represented by a two-character string in which the first character represents the value of the card (A=Ace, J=Jack, T=Ten, 8=Eight, etc.) and the other character is the suit abbreviation (S=Spades, etc.). Also included is a feature which causes play to stop when all 26 points have been played out prior to the end of the game. This saves needless playing time; the program immediately gives the score and then "deals" the next hand.

DYNACOMP feels that this program will provide you with many entertainment-filled hours. We strive to provide the best programs at fair prices. As time goes by, we plan to update our programs to make them even more challenging. We are always happy to receive suggestions (even if they take the form of complaints). If you notify us of any problems you may have in running our programs on your computer, we will gladly instruct you on how to fix your particular version; or, if need be, will send you an updated version for a nominal copying fee.

Sample game of HEARTS 1.5:

RUN

\*\*\*\*\*  
\*\*\*\* HEARTS 1.5 \*\*\*\*  
\*\*\*\*\*

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HOW MANY POINTS DO YOU  
WISH TO PLAY TO? 75

INPUT A VALUE BETWEEN 0 AND 999  
76.12

SHUFFLING

DEALING

SORTING

Some versions of HEARTS 1.5 require inputting  
a "seed" value for the random number generator.  
With those versions, the same seed will produce  
the same hands.

YOUR HAND:

S: AT863  
H: J652  
D: AK873  
C: AJT

SELECT 3 CARDS TO GIVE PLAYER 2

?AD

?KD

?AC

HAND #3 HAS PASSED TO YOU:

KS AH KH

YOUR HAND:

S: AKT863  
H: AKJ652  
D: 873  
C: JT

Whichever hand is holding the 2 of clubs must  
lead that card. If your hand contains that card,  
card, then a message will be printed to remind  
you that it must be led.

HAND 3 PLAYS THE 2C

YOU PLAY THE ?JC

HAND 2 PLAYS THE AC

\*THE HIDDEN CARD WAS THE QC\*

YOUR HAND:

S: AKT863  
H: AKJ652  
D: 873  
C: T

HAND 2 PLAYS THE AD

HAND 3 PLAYS THE QD

YOU PLAY THE ?8D

YOUR HAND:

S: AKT863  
H: AKJ652  
D: 73  
C: T

HAND 2 PLAYS THE KD

HAND 3 PLAYS THE JD

YOU PLAY THE ?AS

RENEGE, TRY AGAIN.

YOU PLAY THE ?7D

Diamonds were led. You must follow suit  
otherwise this error message is printed.

YOUR HAND:

S: AKT863  
H: AKJ652  
D: 3  
C: T

HAND 2 PLAYS THE 7C  
HAND 3 PLAYS THE KC  
YOU PLAY THE ?TC

YOUR HAND:

S: AKT863  
H: AKJ652  
D: 3  
C:

HAND 3 PLAYS THE 7S  
YOU PLAY THE ?TS  
HAND 2 PLAYS THE JS

YOUR HAND:

S: AK863  
H: AKJ652  
D: 3  
C:

HAND 2 PLAYS THE 9S  
HAND 3 PLAYS THE 2S  
YOU PLAY THE ?AS

YOUR HAND:

S: K863  
H: AKJ652  
D: 3  
C:

YOU PLAY THE ?2H  
ILLEGAL TO PLAY A HEART NOW

YOU PLAY THE ?8S  
HAND 2 PLAYS THE 5S  
HAND 3 PLAYS THE TH

Hearts cannot be led until they have been "broken" or unless that is the only suit left in your hand. Note that in HEARTS 1.5, the dropping of the queen of spades does NOT constitute breaking hearts.

YOUR HAND:

S: K63  
H: AKJ652  
D: 3  
C:

YOU PLAY THE ?6S  
HAND 2 PLAYS THE 4S  
HAND 3 PLAYS THE 9H

YOUR HAND:

S: K3  
H: AKJ652  
D: 3  
C:

YOU PLAY THE ?3S  
HAND 2 PLAYS THE QS  
HAND 3 PLAYS THE TD

The queen of spades falls! It costs hand #2 13 points.

YOUR HAND:

S: K  
H: AKJ652  
D: 3  
C:

HAND 2 PLAYS THE 3H  
HAND 3 PLAYS THE 9C  
YOU PLAY THE ?2H

YOUR HAND:

S: K  
H: AKJ65  
D: 3  
C:

HAND 2 PLAYS THE 3C  
HAND 3 PLAYS THE 8C  
YOU PLAY THE ?AH

YOUR HAND:  
S: K  
H: KJ65  
D: 3  
C:

HAND 3 PLAYS THE 2D  
YOU PLAY THE ?3D  
HAND 2 PLAYS THE QH

YOUR HAND:  
S: K  
H: KJ65  
D:  
C:

YOU PLAY THE ?5H  
HAND 2 PLAYS THE 4H  
HAND 3 PLAYS THE 9D

YOUR HAND:  
S: K  
H: KJ6  
D:  
C:

YOU PLAY THE ?6H  
HAND 2 PLAYS THE 8H  
HAND 3 PLAYS THE 6D

YOUR HAND:  
S: K  
H: KJ  
D:  
C:

HAND 2 PLAYS THE 7H  
HAND 3 PLAYS THE 5D  
YOU PLAY THE 3D  
ERROR IN LEAD, TRY AGAIN.  
YOU PLAY THE JH

The 3 of diamonds was not in the hand.  
It therefore could not be legally played  
and an error message was printed.

YOUR HAND:  
S: K  
H: K  
D:  
C:

YOU PLAY THE ?KH  
HAND 2 PLAYS THE 6C  
HAND 3 PLAYS THE 4C

ALL 26 POINTS HAVE  
BEEN ACCOUNTED FOR.

	YOU	PLAYER 2	PLAYER 3
THIS			
GAME:	8	17	1
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TOTAL:	8	17	1

Since all 26 points have been played out,  
there is no need to continue play. The  
score for this game is printed out along  
with the cumulative score. This particular  
game will end after a player's score exceeds  
75 points. Otherwise another hand is auto-  
matically dealt out.









